

DOCKET NO.: MSFT-0681/183208.01
Application No.: 09/322,457
Office Action Dated: December 9, 2003

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Amendments to the specification:

Please replace the paragraph on page 14, line 26, with the following rewritten paragraph:

CI --Figure 2 is a block diagram illustrating the components of a system that uses the object tracking system. In the following, the terms "object" and "resource" are used interchangeably. These terms refer to any software entity that can be tracked and that may correspond to a real-world component. The system includes nodes 201 and a bus manager 202 that are interconnected through a communications link or bus 204. The communications link can be any physical or logical means for communicating between entities. Each node may contain resources that request access to other resources. A resource that requests access to another resource is referred to as a client resource or client, and a resource that is accessed by another resource is referred to as a server resource or server. The bus manager tracks all the resources as they come up and go down. The bus manager receives notifications when each resource comes up and goes down. Each node on which a resource is located, referred to as a server node, notifies the bus manager when a resource comes up in that node, [[mode]] in a process referred to as "attaching," and notifies the bus manager when a resource goes down, in a process referred to as "detaching."--

Please replace the paragraph on page 15, line 13, with the following rewritten paragraph:

CG --The watching of a resource is coordinated by the bus manager, but the monitoring of a resource is performed on a client-to-server node basis without interaction from the bus manager. When a client wants to watch a resource so that it knows when the resource is in the up state, the client node notifies the bus manager. The resource is identified using a tracking reference. If the resource is already up, then the bus manager then notifies the client node that the resource is up. Otherwise, the bus manager notifies the client node when the resource comes up. When the client node is notified that the resource is up, it may notify the bus manager to stop watching for the resource. The monitoring of a resource is performed on [[opt]] a peer-to-peer basis. That is, once a client node is informed that a resource has entered the up state, it establishes a connection directly with the server node that contains the resource. Once the connection is established, the

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client node notifies the server node periodically note that is up and running. If the server node does not receive this notification, it assumes that the client node is no longer up and running and resets its internal state accordingly. Similarly, if the client node receives an error when sending its periodic notification to the server node, it assumes the server node is down and resets its internal state accordingly. When the resource goes down, the server node notifies the client node that the resource is now down. Each node includes clients 205, a resource tracking system 206, and a resource manager 207. A client requests the resource tracking system to provide pointers to resources and to notify the client when resources come up or go down. The resource tracking system interacts with the resource manager to watch, monitor, and retrieve pointers to the resource. The resource manager also detects when resources on its node come up and go down and notifies the bus manager or other nodes as appropriate. The nodes may all be computer systems with a central processing unit, memory, and input/output devices. The software components and data structures of these nodes may be stored on computer-readable medium such as memory, CD-ROM, flexible disk, hard disk, and so on and may transmitted via a data transmission medium.--
